

OFFICERS OF THE MILWAUKEE RADIO AMATEURS CLUB INC.  
1931 & 1932

President C.N.Crapo 2111 E.Newton Milwaukee,Wisc.

Vice Pres. C.O.Meyer 2607 N.9th St. " "

Sec'y & Treas. H.G.Barnes 2841 N.Murray Ave Milwaukee Wisc.

Board Of Directors

C.N.Crapo 2111 E.Newton Ave Chairman

H.F.Warding 4425 N.30th St.

F.Catel 2944 N.Murray Ave.

D.E.Seibel 2219 N.37th St.

L.A.Wollaeger 280 Martha Washington Dr.

G.F.Ward 948 Bartlett Ave.

C.O.Meyer 2607 N.9th St.



Milwaukee Radio Amateurs' Club, Inc.  
Minutes of Regular Meeting of Sept. 17, 1931

The meeting was called to order by President Wollaeger at about 8:30 P.M. 33 members and visitors were present.

Mr. Crane, Chairman of the Traffic Committee, reported on traffic activity during the summer. He stated that traffic activity had shown an increase for the last two years, being about the same this summer as last summer.

Mr. Catel was asked to tell the visitors something of the history of the Club, this being the first meeting of the year. He did so, pointing out that the club had its origin in 1917, and that at that time meetings were held in the houses of the members. He told of the growth of the club, outlining the organization and stating the requirements for membership.

Mr. Kurth announced that Chas. O Meyer was to be married next month. Mr. Meyer stated that he had received no card for the special meeting. Mr. Reinke said he had had the same experience, and that he had learned of the meeting while in Racine.

Mr. Catel said that his new transmitter, using the quarter kilowatt screen grid power tube won in the Club's contest last season, would be on the air in two weeks. He also stated that the jug had hatched out a new one during the summer, which had already grown to the same size, so that he has two of the jugs now. Mr. Wollaeger expressed concern over the completeness of the filament.

Mr. Kurth pointed out two visitors, Messrs Garcia and Cobb, and suggested that we hear from them. Mr. Garcia, W9HQR, XW2CJV, responded by saying that he was glad to be at the meeting, and that he expected to join the club. Mr. Everett Cobb, one time operator and announcer of WISN, stated that he was now travelling for the Piezo Electric Company of New Dorff, N.Y. He stated that in his travels he had come across one of the ham transmitters used in the 1922 Transatlantic Tests now in use as a broadcasting station in Red Bank, N.J., and thought this an excellent illustration of the regard amateur equipment was held in. He showed the members some of the crystals and holders made by his company. He stated that he had always enjoyed the Club, that it had been an inspiration to him for many years, and that the social side of the club had made his hobby more enjoyable. Mr. Catel asked if the frequency precision made possible by their equipment would be necessary or advisable in amateur work, and stated as his opinion that it was not necessary.

Mr. Tucholski stated that the club usually made a drive at the beginning of the season to stimulate activity in the club. He asked how many of the members present were on the air. Less than 10 held up their hands. He suggested that the club make a drive to get more stations on the air. He further suggested that sales be held at the meetings to help some of the men obtain necessary parts for their stations. Mr. Catel, in commenting on this, was in favor of holding exchanges of equipment also.

Mr. Catel suggested that circular letter be sent to all hams in Milwaukee County regarding the club. Also suggested some newspaper publicity regarding the code classes.

1931-1932 C.N. CRANE W9SV  
BPP



minutes of regular meeting of Sept. 17, 1931.

Mr. Kurth suggested that reduced dues would attract more members. Mr. Wareing commented favorably on this idea.

Mr. Seibel criticized the Secretary because of the incompleteness of the clubs mailing list. The Secretary explained that the mailing list was made up of names and addresses taken from the Citizens Call Book, the Clubs membership list and the A.R.R.L. membership list. He stated that no mailing list was turned over to him by his predecessor in office. The secretary criticized the membership committee chairman, Mr. Gatel, for not doing the things he thought necessary to boost the membership.

Mr. Gatel suggested that speakers at the meetings would help boost the attendance at meetings. Mr. Wareing said that there were plenty of capable speakers in town. Mr. Wollaeger stated as his opinion that too many speakers kept members away from the meetings.

Mr. Ranft suggested obtaining technical movies from large manufacturers. He offered to run the machine.

Mr. Wareing reminded those present that the officers for the succeeding season were elected at the next meeting. Asked those not in good standing to pay up their dues, and those who were non-members to join the club before the next meeting. He also asked each man present to bring another ham with him next time.

Mr. Gatel suggested a broadcast re. the election.

Mr. Wollaeger asked each man to bring another with him next week.

Mr. Meyer stated that one of the visitors, W9HFA, told him that several hams he had approached to come to the meeting with him had replied "What's the use, all they do there is smoke and make a lot of noise."

Mr. Reinke showed a letter from F.E. Handy regarding 160 meter activity, especially with regard to the Transatlantic Tests to be held in November. He also read from another letter regarding code practise stations on the 160 meter band. He said that he expected to use his own station W9ES0 for this work later in the year. He asked if anyone would loan him an camigraph. He was offered two, and a set of code Victrola records.

A visitor wanted to know if there was code practise class for beginners at about 25 to 30 words per minute. This question caused plenty of interest. An old Morse man who had been in the game since 1914 stated that the important thing in moving traffic was not the time gained, but the elimination of time lost. He stated that an operator should work up his proficiency at sending, and that proficiency in receiving would increase automatically at the same time.

Edward Ranft was voted in as an "Associate member."

Mr. Meyer told of his trouble because his receiving antenna happened to be resonant at his transmitting frequency. He also stated that the Sheboygan amateurs were thinking of organizing a club, and wanted a couple of our men to go up and get them started. Mr. Gatel said that Antigo had a club with ~~XXXXXX~~ members. (11)



Sheet 3 of minutes of regular meeting of Sept.17,1931.

The meeting was adjourned at about 9:55 P.M.

**Treasurers Report:**

Balance on hand Sept.16 .....	\$1.43
Receipts Sept.17 .....	8.50
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Balance on hand Sept.23 .....	9.93
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Respectfully submitted:

H.F.Wareing,  
Secretary-Treasurer.







Milwaukee Radio Amateurs' Club, Inc.  
Minutes of Regular Meeting of Sept. 24, 1931.

The meeting was called to order by President Wollaeger at about 8:30 P.M. 33 members and visitors were present.

Mr. Philippsen stated that the Radio Show would be willing to donate space to the Club for an exhibit of amateur equipment.

~~XXXXXX~~ Mr. Philippsen was voted in as a regular member.

Mr. Topolinski defeated justice again by being voted in as an Associate member.

The Secretary read a letter from the Burlington Amateur Radio Club, stating that they had some 20 members, and a club station located in rooms rented by the club. They extended invitations to any of our men to drop in on them, and said they expected to attend some of our meetings.

Mr. Catel suggested that the Secretary answer the letter. The secretary said that would be up to his successor.

Mr. Catel asked that the Burlington club be placed on our mailing list - also Sheboygan and Antigo clubs.

A non member told of copying a qst from WLMK regarding the fining of an amateur operator \$500.00 for off frequency operation. Mr. Wareing added that the latest Radio Service Bulletin told of the fining of the operator of an unlicensed station \$2,000.00, and the fining of the owner of the property on which the station was located a similar amount with an additional sentence of one year and one day in Federal penitentiary.

Mr. Catel moved that all business be suspended for the election of officers.

Nominations were declared in order. 17 members were nominated for the seven posts as Directors. They were nominated in the following order, the votes received by each nominee being also given: Wareing 17, Moore 7, Zander 7, Wollaeger 11, Barnes 7, Seibel 12, Catel 14, Kurth 4, Crapo 18, Meyer 10, Ward 11, Topolinski 3, Reinke 6, Ranft 6, Philippsen 3, Turner 1, and Woodward 3.

The following were declared elected to the Board of Direction; Crapo, Wareing, Catel, Seibel, Wollaeger, Ward and Meyer. The alternate director is usually chosen as the eight highest in number of votes. However, three men were tied for this post, as follows: Moore, Zander and Barnes. After some argument, it was decided that the new Board should choose its own alternate member.

The meeting was then adjourned for the meeting of the new Board.

Respectfully submitted:

*H. F. Wareing*  
H. F. Wareing, Secretary.



Radio Amateurs'  
Milwaukee ~~XXXXXXXXXXXX~~ Club, Inc.

Minutes of Board of Directors meeting of Sept. 24, 1931.

Mr. Crapo was suggested as President by Mr. Seibel. The vote was unanimous.

Mr. Barnes was suggested as Secretary by Mr. Catel. The vote was unanimous.

Mr. Meyer was suggested as Vice President by Mr. Catel. The vote was unanimous.

Mr. Moore was suggested as alternate director by Mr. Wareing. Mr. Zander was suggested for this post by Mr. Catel. The vote was four to three in favor of Mr. Moore.

Mr. Crapo was suggested as Traffic Committee Chairman by Mr. Wareing. Mr. Catel pointed out that the President selects his own committee chairmen. Mr. Crapo said that he would appoint the committee chairmen at the next meeting.

Mr. Furth was appointed chairman of the code class committee.

Mr. Wareing moved that the dues for members be cut to \$0.25 per month for regular and associate grades, and to 15 cents per month for junior grade; further, that the initiation fee remain at \$0.50. The vote on this motion was unanimously in favor.

It was decided that the next meeting of the Board be held on ~~Sept~~ Oct. 1st. at 7:30 P.M., and that Board of Direction meetings be held thereafter on the first Thursday of each month at 7:30 P.M.

The secretary was asked to notify his successor that it would be necessary to inform the Secretary of State, and Dr. Barrett of the Library of the names of the new officers.

Respectfully submitted:

*H. F. Wareing*  
H. F. Wareing,  
Secretary.

Treasurers Report:

Balance on hand Sept. 23 .....	\$9.93
Receipts Sept. 24 .....	13.75
	-----
Balance turned over to new Treasurer ....	23.68
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Note: It will be the duty of the new treasurer to extend all payments credited to dues for and after September 1931 at the new rate.

Respectfully submitted:

*H. F. Wareing*  
H. F. Wareing,  
Treasurer.



Milwaukee Radio Amateurs Club Inc.

Meeting of Oct 8, 1931

The meeting was called to order by the president at 8:00

Mr. Meyers of the membership committee reported that he has two prospects lined up for membership.

Mr. Kurth reported that the code class is making headway and that it is not too late for more to enter.

Mr. Reinke informed the members that in the near future he will be on the air two nights a week on the 160 meter band with code ~~th~~ at a speed that will interest novices in the game.

Mr. Catel of the papers and publications committee, briefly scanned the October issue of QST, he pointed out ~~varous~~ various articles that would interest the new members. He also added that his committee could not function properly without the necessary magazines.

Mr. Wareing reported that the technical committee had nothing to report but added that he would deliver a very concise explanation on the theory and operation of the pentode tube.

The president ~~also~~ read a letter about there being an all Wisconsin night on 3500 Kc. The prizes to date consisting of a tube and a string of sausage.

Mr. Wareing spoke briefly about a dynatron frequency meter that he has recently reconstructed.

G.O.#113 was discussed at length by the membership.

Mr. Meyer read ~~another~~ article from Hearst's American Weekly, about some of the freaks of radio, such as music emanating from a pot of beans or a the plumbing in a house.

Mr. Kurth made a motion that the club purchase new dry-cells for the code class.

There being no further business the meeting was adjourned at 9:15.

Respectfully submitted,

H.G. Barnes Sec'y.

Treasures report:

Bal. on hand Oct 8 12.68  
Initiation & Dues Col. 2.50  
No disbursements  
Bal. on hand Oct. 15, 1931 -15.18



The Milwaukee Radio Amateurs Club, Inc.

Minutes of the regular of Oct 15, 1931

The meeting was called to order by the vice-president Mr. Meyer at 8:05

The chairman read a letter from the Supervisor of Radio informing the members that under no circumstances could any radio station be operated after the station license had expired, even though application for renewals had been made.

Melvin Frank W9HFJ was voted into the club as a regular member.

Elmer R. Mokros was voted in as an associate member.

Robert R. Bell was voted in as a junior member.

Mr. Kurth advised the membership that for every 5 new members the club will give an ARRL pin.

Mr. Catel of the P&P committee read excerpts from a new commercial radio operators magazine. He also reported on an article about the number of various classes of commercial operators that are licensed to date.

Mr. Wohlhaeger had nothing to report on the publicity committee.

Mr. Wareing gave a talk on the theory of the pentode tube and its use in receivers.

Mr. Reinke described a new product of the Cutler-Hammer Co. in the form of a thermal overload cut-out.

There being no further business the meeting was adjourned at 9:30.

Respectfully submitted

*H.G. Barnes*

H.G. Barnes Sec'y.



The Milwaukee Radio Amateurs Club, Inc.

Minutes of the regular meeting of Oct 22, 1931

The meeting was called to order by the president Mr. Crapo at 8:10 PM.

Mr. Meyer of the membership committee had nothing to report. ~~for the~~

Mr. Phillipsen of the Publicity committee had nothing to report.

Mr. Catel of the Papers & Publications committee dicussed an article about the elimination of ignition interference aircraft radio work. He also reported on a universal meter that has been recently put on the market by the Weston Electrical Instrument Co.

Mr.            gave a very interesting report on the construction of a dynatron frequency meter and how he uses it to measure the frequency of of various stations.

W9VH of Chicago addressed the club and expressed his pleasure of having attended the meeting.

The chairmen of the Technical committee in stern defiance of ~~the~~ his technical advisers gave a talk about standing waves on Hertzian antennas, and why they are terminated in an infinite impedance.

There being no further business the meeting was adjourned at 9:40.

Respectfully submitted

*H. G. Barnes*  
H. G. Barnes Sec'y.

Treasures report:

Balance on hand Oct 15, 1931	15.18
Disbursements, Citizens Call Book	.21
"            , 2 dri-cells for code class	.70
	<hr/> 14.09
	.50
	<hr/> 14.77
Balance on hand Oct 29, 1931	

Reciepts



Milwaukee Radio Amateurs Club, Inc.

Minutes of the regular meeting held Oct 29, 1931

The meeting was called to order by the president at 8:05

Seymour Michel was voted into the club as a junior member.

Mr. Meyer had nothing to report on the membership committee.

Mr. Kurth reported that the code class is going ahead as usual.

Messrs. Wollaeger & Phillipsen of the publicity committee had nothing to report but they assisted the technical committee in giving reports.

Mr. Phillipsen gave a brief summary of about the modulation of 2 type 45 tubes in push-pull with 2 type 47 pentodes in push-pull.

Mr. Catel of the P&P committee discussed an article in the latest QST about how to obtain 100% modulation with a transmitter without reducing the carrier amplitude. He also explained an article about how to obtain more efficient operation from xtal controlled oscillators.

Mr. Wareing of the technical committee started off the evenings discussion by explaining the why and where of, of class A, B, and C amplifiers.

Mr. Tucholski asked if some member could borrow him a phonograph pick-up, Mr. Seibel granted him the use of one.

Mr. Wareing informed the members that a new filamentless tube will appear on the market very soon.

Mr. Wollaeger gave a brief description of a new National receiver that he has recently purchased.

There were 31 present at the meeting.

There being no further business the meeting was adjourned at 9:40.

Respectfully submitted,

H.G. Barnes Sec'y

Treasures report

Receipts	.15
Disbursements for new membership certificates	3.50
Balance on hand Nov. 4.	11.42



The Milwaukee Radio Amateurs Club, Inc.

Minutes of the meeting held Nov 5, 1931

The meeting was called to order by the president Mr. Crapo at 8:10.

Mr. Meyers had nothing to report on membership.

Mr. Kurth reported that he has made an audio frequency oscillator and that it is for sale.

Mr. Crapo asked if any of the members are desirous of having seeds with stations in Detroit.

Mr. Wareing of the technical committee gave a report on an eliminator that is used in supplying plate voltage to receivers in automobiles. This unit operates off of the 6 volt car battery. It uses a vibrator and plenty of capacity to produce the A.C. which is then rectified by two 171 tubes. The advantages of a unit of this type over "B" batteries was explained.

Mr. Meyers complained that he does not hear any local fones on the air.

Mr. Lippincott asked if a 47 pentode could be substituted for a 27. He was advised that due to the filament construction it would not be possible.

Mr. Zander reported that he has recently constructed a frequency meter and that it remains to be calibrated.

Mr. Kurth was transferred to regular membership.

Mr. Wareing suggested that the members build up 5 meter xmitters & receivers.

Mr. Crapo asked if any one cared for the job of route manager for southeastern Wisconsin.

Mr. Lippincott reported that there is a very promising club at Janesville of about 25 or 30 members.

Mr. Reiss who recently paid a visit to LaCrosse reported that the Radio Club up there is active and that they are looking for seeds.

There being no further business the meeting was adjourned at 9:40

Bramble W. Burke - Adm - Associate -  
Robert C. Barth - " - " -

Respectfully submitted

H.G. Barnes  
H.G. Barnes Sec'y.



The Milwaukee Radio Amateurs Club, Inc.

Minutes of the Board of Directors meeting held Nov 5, 1931

The meeting was called to order by the chairman Mr. Crapo.

Directors present were, Messrs. Crapo, Meyers, Wollaeger & Wareing

Mr. Crapo brought up the ~~question~~ about starting up some sort of a movement to increase the clubs membership.

The question of programs was and their planning was discussed at length. Mr. Wareing offered to give instructive talks to the members at various meetings, but he also gave the board to believe that it is quite obligatory on the other members to give talks.

There being no further business the meeting adjourned.

*H.G. Barnes*  
H.G. Barnes Sec'y



Milwaukee Radio Amateurs Club, Inc.

Minutes of the regular meeting held Nov 12, 1931

The meeting was called to order by the president Mr. Crapo at 8:10.

Mr. Meyers of the membership committee reported that there is a moratorium on the admission of new members which he hopes is only temporary.

Mr. Phillipsen had nothing to report on publicity.

Mr. Kurth reported that the code class is making its usual strides.

Mr. Catel reported on the use of crystals as an aid to industry.

The secretary read a letter from headquarters relative to QST subscriptions and printed matter for use in stations.

Mr. Crapo suggested to the membership that some kind of a new contest should be started, Mr. Wollaeger suggested that the club have a standard frequency contest of its' own.

Mr. Phillipsen said that 160 meters should be used by fone stations, on account of best qrm his suggestion was debated by the membership.

In response to a of the president about the building of 5-meter xmtrs and receivers, Mr. Wollaeger reported that he had made up a receiver but that he could not hear anything because there is no one on the band.

Mr. Catel gave a few remarks as to how a receiver is adapted to motorcycle.

There being no further business the meeting was adjourned at 9:40.

Respectfully submitted

*H. G. Barnes*

H. G. Barnes Sec'y.

Treasures report:

No disbursements.....	
Receipts Dues.....	\$5.15
" from sale of call bks.	10.50
Balance on hand Nov 19,	27.07



The Milwaukee Radio Amateurs Club, Inc.

Minutes of the regular meeting held Nov 19, 1931

Mr. Meyers of the membership committee had nothing to report.

Mr. Kurth of the code class had nothing to report but said that he had reduced the price of his audio oscillator.##

Mr. Phillipsen of the publicity committee said that he has been working on the Milwaukee Journal for some kind of publicity for the club. Mr. Wollaeger of the same committee said that he has contacted the Wisconsin News but has been unsuccessful to date.

Mr. Catel of the P&P committee reported on cold cathode lights for illumination purposes, various uses of the various classes of foto cells, and the addaptation of condenser theories in the rubber industry to measure the thickness of rubber on a production basis.

Mr. Wareing of the technical committee had nothing to report.

Mr. Reinke reported on the operation of a fone xmtr. and explained the absorption, grid and plate methods of modulation.

Mr. Scarvaci suggested that the club hold an all Milwaukee QSO party. The president appointed Mr. Meyers as chairman. Mr. Meyers announced that the party will be held on Dec 14. Mr. Reinke offered to donate a xtal as a prize, Mr. Burke will give a xtal holder. Mr. Machel will evacuate one tube as a prize. The judges will be Messrs. Ranft, Wareing and Barnes who will also be chairman.

There being no further business the meeting was adjourned at 9:30.

Respectfully submitted

H.G. Barnes Sec'y



Milwaukee Radio Amateurs Club, Inc.

Minutes of the regular meeting held Dec 3, 1931

The meeting was called to order by the president Mr. Crape at 8:15.

Mr. Meyers of the membership committee had nothing to report.

Mr. Wollaeger and Mr. Phillipsen of the publicity committee had nothing to report.

Mr. Catel of the p&p committee described a new form of regeneration which appeared in December QST.

The question of the rise in antenna current, when the transmitter was modulated at 100% was discussed. Mr. Wareing informed the members that a  $22\frac{1}{2}\%$  increase in antenna current was necessary to obtain 100% modulation, or that the power in the antenna will have to increase 50% to obtain 100% modulation.

Mr. Wareing informed the members that the Radio Inspector would give examinations in room 701 of the City Hall, on Friday & Saturday.

Mr. Crape asked Mr. Wareing if he could explain the advantages of parallel & series feed. Mr. Wareing explained that one was as good as the other but from the standpoint of safety the series feed is not very desirable because the full plate voltage is on the tank inductance and capacity.

Mr. Meyers who is promoting the QSO party informed the members as to when & how it will take place. It will take place Dec 14 between the hours of 7-12 on either 80 or 40 meters fone or CW. A clear and concise log shall be kept by the participants. The log shall contain the following information.

Call of station worked  
Your note & QSA report  
His " " " "  
Length of QSO

1st prize:

1 xat1 donated by H. Reinke and 1 holder donated by B. Burke.

2nd prize:

1 type 250 tube and 1 5 watt GE tube.

And a prize for each participant.

There must be at least 3 QSO's to be eligible for a prize.

Mr. Mokros announced to the membership that one of our new members ~~had~~ ~~see~~ Robert Bell had recently received his call W9E0B

There being no further business the meeting was adjourned  
at 9:30

Respectfully submitted

H.G. Barnes Sec'y

Treasures report:

Balance on hand Nov 19, 1931	\$27.07
No disbursements	
Receipts	<u>1.65</u>
Balance on hand Dec 10	\$28.72



Milwaukee Radio Amateurs Club, Inc.

Minutes of the regular meeting held Dec 10, 1931

The meeting was called to order by the President Mr. Crape at 8:15 PM. There were 31 present.

Mr. Crape informed the membership that the new government call books were off the press and that they were available for 35¢ per copy at the Government Printing Office.

The secretary read a letter from the Citizens Call Book Co. informing the membership that the winter edition of their call book will be off the press december 15th. The membership was canvassed as to how many call books the secretary should order, the president requested the secretary to order 15 copies.

Mr. Meyers had nothing to report on membership.

Mr. Kurth made a motion that C. O. Meyers be presented with an ARRL pin for his efforts in obtaining 5 new memberships. Mr. Seibel said that it was a standing order of the club that any member who signed up 5 or more new members will automatically receive a pin. He also took great pleasure in chiding the secretary for his supposed negligence.

Mr. Catel of the P&P committee had nothing to report.

Mr. Kurth reported that most of those who took the examination for amateurs license (operator) passed.

Mr. Wollaeger said that there may be something about amateur radio in next sundays Sentinel.

Mr. Wareing had nothing to report as chairman of the technical committee.

Mr. Moore gave a description of a receiver that he has recently constructed.

Mr. Ranft made a motion that Mr. Burke be elevated to regular membership, in as much as he now holds an operators license

Mr. Meyers again reviewed the rules and regulations relative to the All-Milwaukee QSO party that is to held Nov. 14.



Mr. Zander was asked to make a new sign to be placed at the entrance to the meeting room.

Mr. Gatel reported that the time is not very far off when the club will hold it's annual QSO party. We held a Central Division 4 years ago and it is proper that we hold another Central again, provided the membership approves.

~~The Secretary reported that the press reports that~~

The secretary reported that there has evidently been a violation of the Radio Act of 1927, because the Federal Grand jury now assembled here is to review the evidence.

Mr. Topolinski our general counsel was asked for an opinion. He informed the members that if the Grand Jury feels that there has been a violation they will issue an indictment and the defendant will be brought to trial in Federal court.

The secretary read a few a few articles that were picked at random from the minutes of the last few years.

Respectfull submitted

*H.G. Barnes*

H.G. Barnes Sec'y.



Milwaukee Radio Amateurs Club, Inc.

Minutes of the ~~reg~~ regular meeting held Dec 17, 1931

The meeting was called to order by the president at 8:20, there were 32 present.

Mr. Seibel presented the club with a copy of the Roberts Rules of Order.

The president read a letter from an organization known as the Arrowhead Radio Amateurs, ~~located at~~ who confine their operations in and around Duluth, Minn. It is their plan to make up a book containing pictures and other data about stations around the country.

The president also read a letter from W9egp at Stevens Point, Wis. The letter explained that there is plenty of action up there and that they will attend the clubs party as usual.

Mr. Catel of the P&P committee read from the current issue of Radio Engineering which described a new 100 K.W. three element tube. The tubes normal plate voltage is 20,000 volts at 5,000 mills, a plate resistance of 2800 ohms, and an amplification factor of 48. The filament draws 207 amperes at 33 volts. Mr. Catel also ~~read~~ discussed articles that appeared in Modern Radio, namely a substitute for a crystal which will directly excite the grids of a power tube. He also informed the club that the February issue of Modern Radio would carry an article describing an oscilloscope which can be built for \$2.85.

Mr. Catel made a motion that the club subscribe for Modern Radio at 1.25 per year, the motion was passed and the secretary was instructed to subscribe.

Mr. Wareing of the technical committee had nothing to report.

The results of the all Milwaukee QSO party were announced, and the prizes were awarded. A total of 23 stations took part in the party, and 8 logs were received in time to be judged.

W9GIL	made	11	qso's	W9BVB	made	8	qso's
W9ESO	"	15	"	W9DTK	"	10	"
W9GVL	"	13	"	W9VD	"	12	"
W9NY	"	1	"	W9FSS	"	13	"

Prizes were awarded to the following:

- 1st - H. Reinke W9ESO pair of type 250 tubes.
- 2nd - C. Meyers W9GVL xtal & holder
- 3rd - H. Kurth W9FSS 15v. D.C. meter
- 3d - C. Crape W9VD Fountain pen
- 4th - J. Scaryaci W9GIL 1 202 tube and 50,000 ohm resistor
- 5 " - F. Catel W9DTK 1 mike
- 6 " - F. Moore W9BVB set of audio replacements xformers.



Minutes of the Regular meeting held Dec 17, 1931

Mr. Wareing made a motion that the club thank Mr. Meyers for his efforts in promoting the QSO party.

~~Mr. Reinke made a motion that~~

Mr. Reinke told the membership about his recent visit to the Fox River Valley Radio Club. He said that the meeting was conducted in an orderly manner and that it looked like a nice club.

There being no further business the meeting was adjourned at 9:55.

Respectfully submitted,

*H.G. Barnes*

H.G. Barnes Sec'y.